

In the Claims:

Please amend the claims as follows:

1. (currently amended) A device for motor vehicles ~~having~~ comprising an engine, a power transmission, a wheel suspension and a support structure adapted to be mounted in the vehicle and a steering wheel, which is rotatably connected to the support structure, the device comprising:

a control unit,

a sensor device operatively connected to the control unit, wherein the sensor device is comprises at least one sensor adapted to be mounted on the steering wheel and adapted to sense vibrations in the steering wheel and to provide a sensor signal related to the sensed vibrations,

an actuator device operatively connected to the control unit and adapted to influence the vibrations in the vehicle, and

a reference sensor operatively connected to the control unit and adapted to sense vibrations outside the support structure to provide a reference signal to the control unit, the reference sensor comprising a first reference sensor element adapted to be mounted on at least one of the engine and the power transmission and arranged to sense engine-excited vibrations and a second reference sensor element adapted to be mounted in connection with the wheel suspension and arranged to sense road-excited vibrations,

wherein the control unit is adapted to control the actuator device, with regard to the sensor signal and reference signal, to act on the vehicle in such a way that a desired vibration character in the steering wheel is obtained.

2. (cancelled)

3. (cancelled)

4. (previously amended) The device according to claim 1, wherein the sensor device includes at least one sensor element adapted to be mounted on the steering wheel.

5. (previously amended) The device according to claim 4, wherein the sensor device includes at least a further sensor element adapted to be mounted on the support structure.

6. (previously amended) The device according to claim 1, wherein the actuator device includes at least one actuating element adapted to be mounted and act on the support structure.

7. (previously amended) The device according to claim 6, wherein the support structure includes a support beam extending in an axial direction transversally to a longitudinal driving direction of the vehicle, wherein the actuator device includes at least one actuating element adapted to be mounted and act on the support beam.

8. (previously amended) The device according to claim 4, wherein said further sensor element is adapted to be mounted on the support beam.

9. (previously amended) The device according to claim 7, wherein the support beam has

a periphery, wherein the actuator device includes at least two actuating elements which are adapted to be mounted around the periphery with an angle distance between each other.

10. (previously amended) The device according to claim 9, wherein the actuating elements are uniformly distributed around the periphery.

11. (previously amended) The device according to claim 9, wherein the actuating elements are provided at substantially the same axial position.

12. (previously amended) The device according to claim 7, wherein the actuator device is adapted to provide a bending movement of the support beam.

13. (previously amended) The device according to claim 1, wherein the steering wheel is connected to a steering column, wherein the actuator device includes at least one actuating element adapted to be mounted and act on the steering column.

14. (previously amended) The device according to claim 13, wherein the actuator device is adapted to provide a bending movement of the steering wheel.

15. (previously amended) The device according to claim 1, wherein the control unit includes an adaptive filter which is adapted to generate an actuating signal supplied to the actuator device for said influence on the vibrations in the vehicle.

16. (previously amended) The device according to claim 1, wherein the reference sensor is connected to the adaptive filter and arranged to supply the reference signal to the adaptive filter, wherein the reference signal forms the basis for the actuating signal.

17. (previously amended) The device according to claim 1, wherein the sensor device is arranged to supply the sensor signal to the adaptive filter for updating the adaptive filter.

18. (previously amended) The device according to claim 15, wherein the control unit includes a prefilter, which is connected to the reference sensor and arranged to provide a filtered reference signal.

19. (previously amended) The device according to claim 15, wherein the control unit includes a control algorithm, which is located between the sensor device and the adapted filter and arranged to filter the sensor signal supplied to the adaptive filter.

20. (previously amended) The device according to claim 18, wherein the prefilter is connected to this control algorithm for the supply of the filtered reference signal to the control algorithm.

21. (currently amended) A device for motor vehicles comprising an engine, a power transmission, and a wheel suspension, comprising:

a support structure adapted to be mounted in the vehicle,

a steering wheel rotatably connected to the support structure,

a control unit,

a sensor device operatively connected to the control unit, wherein the sensor device is comprises at least one sensor adapted to be mounted on the steering wheel and adapted to sense vibrations in the steering wheel and to provide a sensor signal related to the sensed vibrations,

an actuator device operatively connected to the control unit and adapted to influence vibrations in the vehicle, and

a reference sensor operatively connected to the control unit and adapted to sense vibrations outside the support structure to provide a reference signal to the control unit, the reference sensor comprising a first reference sensor element adapted to be mounted on at least one of the engine and the power transmission and arranged to sense engine-excited vibrations and a second reference sensor element adapted to be mounted on the wheel suspension and arranged to sense road-excited vibrations,

wherein the control unit is adapted to control the actuator device, with regard to the sensor signal and the reference signal, to act on the vehicle in such a way that a desired vibration character in the steering wheel is obtained.

22. (currently amended) A motor vehicle, comprising:

an engine,

a power transmission,

a wheel suspension,

a support structure mounted in the vehicle,

a steering wheel rotatably connected to the support structure, and

a device, wherein the device includes

a control unit,

a sensor device operatively connected to the control unit, wherein the sensor device is comprises at least one sensor mounted on the steering wheel and adapted to sense vibrations in the steering wheel and to provide a sensor signal related to the sensed vibrations,

an actuator device operatively connected to the control unit and adapted to influence vibrations in the vehicle, and

a reference sensor operatively connected to the control unit and adapted to sense vibrations outside the support structure to provide a reference signal to the control unit, the reference sensor comprising a first reference sensor element mounted on at least one of the engine and the power transmission and arranged to sense engine-excited vibrations and a second reference sensor element mounted in connection with the wheel suspension and arranged to sense road-excited vibrations,

wherein the control unit is adapted to control the actuator device, with regard to the sensor signal and the reference signal, to act on the vehicle in such a way that a desired vibration character in the steering wheel is obtained.